<u>REMARKS</u>

Claims 1-78 remain in this application. Claims 1-26, 39, and 52-70 have been cancelled without prejudice. Claims 27, 30, 31, 33, 34, 37, 42, 43, 48-51 have been amended. Claims 71-78 are new. No new matter has been added. Reconsideration is respectfully requested.

Applicant is <u>not</u> conceding that the subject matter encompassed by the claims prior to this amendment is not patentable over the art cited by the Examiner. Claims 1-26, 39 and 52-70 were cancelled in this amendment solely to facilitate expeditious prosecution of the subject matter of claims 27-38, 40-51, and 71-78. Applicant respectfully reserves the right to pursue claims, including the subject matter encompassed by the claims as presented prior to this amendment and additional claims, in one or more continuing applications.

Claims 4-5, 7, 11-13, 17-20, 39, 57, 61-64, 66, 67, 69, and 70 are rejected under 35 U.S.C. §112 second paragraph as being indefinite. These claims have been cancelled so the rejections are moot.

Claims 1-26, 39, and 52-70 are rejected under 35 U.S.C. §101 as being directed to non-statutory matter, and under 35 U.S.C. §102(b) as being anticipated by Genie (Genesys-MP User's Guide). Claims 1-26, 39, and 52-70 have been cancelled so the rejections are moot.

Independent claim 27, independent claim 42, and independent claim 49 are rejected under 35 U.S.C. §101 as being directed to non-statutory matter. Dependent claims 28-38, 40-41, 43-48, and 50-51, which depend from claims 27, 42, or 49, are also rejected under 35 U.S.C. §101 as being directed to non-statutory matter. (As argued further below, applicant has amended independent claims 27 and 42, and some of their dependent claims, to clarify

the claims and to further distinguish them from the cited art.) Applicant traverses the rejections of claims 27-38, 40-51 under 35 U.S.C. §101.

Claims 27-38, 40-51 recite a "computer software product, comprising a computer-readable medium," and are known as "Beauregard" claims. Applicant refers to "Ex parte Bo Li," Appeal 2008-1213, before the Board of Patent Appeals and Interferences, decided November 6, 2008, and specifically to the findings of the Board with regard to a rejection of a claim under 35 U.S.C. §101 (page 8, last paragraph – page 9, first paragraph). In its findings, the Board stated: 'It has been the practice for a number of years that a "Beauregard Claim" of this nature be considered statutory at the USPTO as a product claim' (page 9, lines 3-5). The Board concluded by declining to support the rejection of the claim under 35 U.S.C. §101 (page 9, lines 12-13). In view of the upholding by the Board of the Beauregard claim, as described above, applicant believes that the rejection of Beauregard claims 27-38, 40-51 under 35 U.S.C. §101 should be withdrawn.

Claim 30 is rejected under 35 U.S.C. §112 second paragraph as being indefinite. For clarity, applicant has replaced the term "value-lists" with "lists of values." The amendment is supported in paragraph [0121] of the specification. In view of the amendment to claim 30, applicant believes that the rejection should be withdrawn.

Claim 31 is rejected under 35 U.S.C. §112 second paragraph. Applicant has amended the claim to recite that the adjacent resources have contiguous addresses. The amendment is supported in paragraph [0062]. In view of the amendment to claim 31, applicant believes that the

rejection should be withdrawn.

Claim 33 is rejected under 35 U.S.C. §112 second paragraph. Applicant has amended the claim to recite that the identifier is of a particular outcome of a test program. The amendment is supported in paragraph [0146]. In view of the amendment to claim 33, applicant believes that the rejection should be withdrawn.

Claims 37-38 are rejected under 35 U.S.C. §112 second paragraph. Applicant has clarified claim 37 by deleting the clause "while performing said step of generating." Claim 38 depends from claim 37. In view of the amendment to claim 37, applicant believes that the rejections of claims 37-38 should be withdrawn.

Claims 43-45 are rejected under 35 U.S.C. §112 second paragraph as being indefinite. Applicant has amended claim 43 to clarify that adjacent resources comprise resources having contiguous addresses. The amendment is supported in the specification at paragraph [0062]. Claims 44 and 45 depend from claim 43. In view of the amendment to claim 43, applicant believes that the rejections of claims 43-45 should be withdrawn.

Claim 48 is rejected under 35 U.S.C. §112 second paragraph as being indefinite. Claim 48 has been amended to recite that the unique combination identifier is an identifier of a particular outcome of the test program recited in the claim. In addition, the claim recites the term "list of values" rather than the term "value-lists" used in original claim 48. The amendments are supported in the specification at paragraphs [0121] and [0146]. In view of the amendments to claim 48, applicant believes that the rejection should be withdrawn.

Claim 50 is rejected under 35 U.S.C. §112 second paragraph. Applicant has clarified the claim by deleting

the term "process-linked." The amended claim recites lists of values that are written by a first process and a second process. In view of the amendment, applicant believes that the rejection should be withdrawn.

Claim 51 is rejected under 35 U.S.C. §112 second paragraph. Applicant has amended and clarified the claim by deleting the terms "process-linked" and "unique value." Applicant has qualified the term associated process by an amendment reciting that the process is neither the first or the second process. The amendment is supported in paragraph [0220] of the specification. In view of the amendments, applicant believes that the rejection should be withdrawn.

Independent claim 27 is rejected under 35 U.S.C. §102(b) as being anticipated by Genie. Claim 27 has been amended to distinguish over the cited art, by incorporating the limitation that the recited resource comprises resources that are mutually dependent, i.e., are dependent on each other, and that the resources are non-adjacent by virtue of having addresses that are not contiguous with each other. The amendment is supported in the specification at paragraphs [0061], [0062] and [0146]. Paragraphs [0061] and [0062] describe adjacent resources as being, for example, memories or registers having contiguous addresses or indexes. Paragraph [0146] refers to a listing showing that dependencies exist between non-adjacent resources.

Amended independent claim 27 recites a computer-readable medium having instructions for validating a processor design by simulating execution of a program. The instructions identify a resource that has resources that are dependent on each other, and that have addresses

that are not contiguous with each other. A set of non-unique values is associated with the resource. The resource is accessed by a test program that has two simulated processes, and both processes are executed. On completion of both processes, the instructions verify that there is an equality between one of the non-unique values and a content of the resource.

In rejecting claim 27 the Examiner cited Figure 1, and sections 2.11, 2.11.1, and 2.11.5 from Genie. However, careful search of all of Genie, including those sections cited by the Examiner, reveals no suggestion or teaching of the requirement of amended claim 27, that the resource comprises resources that are dependent on each other, and that the dependent resources have non-contiguous addresses.

Amended independent claim 27 is therefore believed to be patentable over the cited art.

Independent claim 42 is rejected under 35 U.S.C. §102(b) as being anticipated by Genie. Independent claim 42 has been amended by incorporating elements of original dependent claim 48 into claim 42. In addition further limitations which clarify terms in the claim and which distinguish over the cited art have been amended into claim 42. The amendments recite that a list of predicted resource results comprises resources that are mutually dependent, as well as being non-adjacent by having addresses that are not contiguous with each other. The amendments are supported in the specification in paragraphs [0061, [0062], [0121] and [0146].

Amended independent claim 42 recites a computer-readable medium having instructions for verifying an architecture by simulation. The instructions generate a

test program which, inter alia, includes a list of predicted resource results which are resources that are dependent on each other, and which also have non-contiguous addresses. The list of predicted resource results includes more than one permissible result. The test program is simulated using multiple simultaneously executing processes, and an actual result is verified by determining that at least one of the permissible results is equal to the actual result.

In rejecting claim 42 the Examiner cited various sections from Genie, and in rejecting the element of claim 48 amended into claim 42 the Examiner cited section 2.11.5 from Genie. However, as explained above with respect to claim 27, Genie reveals no suggestion or teaching of the requirement of amended claim 42, that the predicted results are resources that are dependent on each other, and that the dependent resources have non-contiguous addresses.

Amended independent claim 42 is therefore believed to be patentable over the cited art.

Independent claim 49 is rejected under 35 U.S.C. §102(b) as being anticipated by Genie. Claim 49 has been amended to distinguish over the cited art, by incorporating the limitation that the recited resource comprises resources that are mutually dependent, i.e., are dependent on each other, and that the resources are non-adjacent by virtue of having addresses that are not contiguous with each other. The amendment is supported in the specification at paragraphs [0061], [0062] and [0146], described above with reference to claim 27.

Amended independent claim 49 recites a computer-readable medium having instructions for predicting non-

unique results by simulating a system design. The instructions generate a test program which, inter alia, includes a list of predicted resource results which are resources that are dependent on each other, and which also have non-contiguous addresses. The list of predicted resource results includes more than one permissible result. A single instruction of the test program is simulated using one process of the program, and possible values of target resources of the instruction are calculated.

In rejecting claim 49 the Examiner cited sections 2.1, 3.1, 2.11, 2.11.3, 2.11.4, and 2.11.5 from Genie. However, careful search of all of Genie, including those sections cited by the Examiner, reveals no suggestion or teaching of the requirement of amended claim 49, that the resource comprises non-adjacent resources that are mutually dependent on each other, and that the dependent resources have non-contiguous addresses.

Amended independent claim 49 is therefore believed to be patentable over the cited art.

Claims 28-38, 40-41, 43-48, and 50-51 are rejected under 35 U.S.C. §102(b) as being anticipated by Genie. Claims 28-38, 40-41, 43-48, and 50-51 depend from one of independent claims 27, 42 and 49, and have been amended as necessary, as explained above, and/or for clarity and to conform with their respective independent claims.

Claims 71-78 are new claims which depend from independent claims 27, 42 or 49. Claims 71-78 recite further features of the present invention, and are supported in the specification at paragraph [0146].

Applicant believes that claims 28-38, 40-41, 43-48, and 50-51 recite independently patentable matter. For

example, claims 71, 75, and 77 recite that the mutually dependent non-adjacent resources are of different types, and claims 72, 76, and 78 recite that the different types comprise memories and registers. There is no hint, suggestion, or teaching in the cited art of such requirements. In the interests of brevity, applicant will not argue the patentability of the remaining dependent claims. In view of the patentability of claims 28-38, 40-41, 43-48, and 50-51, applicant believes that the rejections of claims these claims should be withdrawn.

Applicant believes that the above amendments and remarks are fully responsive to all of the grounds of rejection raised by the Examiner. In view of these amendments and remarks, applicant respectfully submits that all of the claims currently pending in the present application are in order for allowance. Notice to this effect is respectfully requested.

Please charge any fees associated with this response to Deposit Account 09-0468.

Respectfully submitted,

By: _/Suzanne Erez/_____
Suzanne Erez
Reg. No. 46,688
Phone No. 1-888-260-5928

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IBM Corporation
Intellectual Property Law Dept.
P. O. Box 218
Yorktown Heights, New York 10598